

StackFRAC Slimhole retrievable system boosts production from vertical well

[United States, San Juan Basin](#)
[StackFRAC Slimhole System](#)

Background

The San Juan Basin, located in the Four Corners area, is one of the most productive coalbed methane basins in the United States. In 2010, the U.S. Energy Information Administration (EIA) identified the San Juan Basin area in Colorado and New Mexico as the second largest natural gas field in terms of proven reserves. The Fruitland formation, located in the San Juan Basin, is a late Cretaceous deposit and contains a mixture of mudstone, siltstone, sandstone, carbonaceous shale, and coal. The thickness of the pay zone ranges from 300 to 500 ft. Production potential of the methane gas trapped in the coal deposits was first realized in the 1970s.



Challenge

An operator working in Colorado's corner of the San Juan Basin had been producing gas from a 3-stage vertical cased hole well that first came on production in the 1990s. From 2009 to 2013, however, yearly gas production has drastically plummeted from 29,138 to 1,086 Mcf. This decrease in production prompted the operator to look at methods for restimulating the well, while minimizing inside diameter restrictions for flowback.

Solution

The operator decided to run a Packers Plus StackFRAC® Slimhole system on a 2.875-in. liner for restimulation by accessing the existing perforations in the wellbore. Annular isolation of each stage was achieved using RockSEAL® II Cased Hole packers. Each of the two FracPORT™ sleeves and the Hydraulic FracPORT sleeve were aligned with the existing perforations. The StackFRAC Slimhole system was designed to be retrievable such that the liner and tools could be removed from the wellbore after stimulation.



Results

The 3-stage StackFRAC Slimhole system was used to successfully stimulate the well, placing a total of 461,804 lbs of proppant along with 5,949 bbls of fluid. Following restimulation of the well, the completion system was successfully retrieved. The average monthly gas production for the 5 months after restimulation was 81 times higher than the 5 months before stimulation.

The StackFRAC Slimhole system comes in different liner sizes for reentering vertical or horizontal wells. Well solutions are customized based on operator requirements and can be adapted based on changing industry demand. Packers Plus specializes in providing solutions for multi-stage completion systems and technically challenging applications in horizontal, vertical, multi-lateral and high pressure/high temperature wells.

